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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,179	10/05/2001	Cory M. Panattoni	002558-065010US	4474

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EXAMINER
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OLSEN, KAJ K

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 11/05/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/973,179

Applicant(s)

PANATTONI ET AL.

Examiner

Kaj Olsen

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-6 is/are rejected.
- 7) ☒ Claim(s) 3, 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moi et al (USP 5,938,906) in view of Sugimoto et al (USP 4,897,306).

4. Moi discloses a cassette for the formation of slab gels that comprises a pair of transparent plates that are chemically inert and transparent (col. 5, lines 8-15) with a polyacrylamide gel cast therebetween (col. 1, lines 22-30). Moi does not explicitly disclose having the inner surfaces be coated with a nonionic amphiphilic polymer. Sugimoto teaches coating the inner surfaces of the gel supports (i.e. the plates) with an intermediate resin layer that has low oxygen permeability (col. 4, lines 12-24). One of the resins utilized is polyvinyl alcohol, which claim 2 of the instant

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invention evidences is a nonionic amphiphilic polymer. It would have been obvious to one of ordinary skill in the art at the time the invention was being made to utilize the teaching of Sugimoto for the slab gel of Moi in order to minimize the interference of oxygen during gel preparation.

5. With respect to the use of glass, plastic, or polystyrene-acrylonitrile, see Moi, col. 5, lines 8-15 and line 29.

#### ***Allowable Subject Matter***

6. Claims 3 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: With respect to claim 3, the prior art does not disclose nor render obvious the pre-cast polyacrylamide slab gel comprising all the limitations of claim 1 and further comprising the inner surfaces being coated with polyethylene glycol. With respect to the allowability of claim 7, see paragraph 12 from the previous office action.

#### ***Response to Arguments***

8. Applicant's arguments concerning the rejections over the prior art reference Wiktorowicz were persuasive and the examiner has withdrawn those rejections.

9. With respect to the rejections over the teachings of Moi and Sugimoto, applicant urges that the only time Sugimoto refers to polyvinyl alcohol is as one member of a list of polymers,

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and the other polymers are not within the scope of the invention. However, the fact that a reference discloses species other than those claimed does not obviate anticipation of that particular element (see *Ex parte A*, 17 USPQ 2d 1717, 1718 (BPAI 1990)). The fact that Sugimoto teaches other polymers besides polyvinyl alcohol is irrelevant in view of the fact that Sugimoto explicitly teaches a material that anticipates that aspect of the claimed invention. Applicant also urges that polyvinyl alcohol is not the most “prominent” choice of material. First it is unclear how applicant came to this conclusion about polyvinyl alcohol not being a prominent choice. Polyvinyl alcohol is a member of a short list of materials that are described as being the “preferred resins” (col. 4, lines 16-21). Second, whether or not polyvinyl alcohol is the “prominent” coating is irrelevant because polyvinyl alcohol is within the scope of materials utilized as coatings by Sugimoto.

10. Applicant also urges that Sugimoto fails to disclose any distinction between polyvinyl alcohol and the other resins in the list. However, the examiner fails to understand why the applicant believes Sugimoto has a burden to disclose why polyvinyl alcohol is distinct from the other choices on the list. Assuming for the sake of argument that polyvinyl alcohol is no better or no worse than any of the other materials disclosed by Sugimoto, how does this alter the obviousness of utilizing polyvinyl alcohol over any of the other materials? Moreover, even if polyvinyl alcohol isn't as “prominent” a choice as the other materials set forth by Sugimoto (even though there is nothing in the disclosure of Sugimoto to suggest that (see paragraph above)), it is still obvious to utilize polyvinyl alcohol when the choice is between the use of polyvinyl alcohol coatings and uncoated surfaces (i.e. Moi) because polyvinyl alcohol does provide reduced oxygen permeability in comparison with uncoated surfaces.

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11. Applicant has also submitted a Declaration showing the particular advantages provided utilizing a coating of various nonionic amphiphilic polymers. However, it is unclear how these results obviate the rejection of *Moi* in view of *Sugimoto*. It would appear that *Sugimoto* is applying the polymer coating for a purpose distinct from the purpose of the polymer coating of the instant invention (namely, *Sugimoto* is concerned with oxygen permeability). Applicant may have come up with a new reason for coating gel plates with nonionic amphiphilic polymers such as polyvinyl alcohol, but that doesn't obviate the fact that the prior art already recognized the utility of coating the gel plate surfaces with polyvinyl alcohol. Patentability cannot result from an applicant's discovery of a new reason for doing what was already old in the art.

### *Conclusion*

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaj Olsen whose telephone number is (703) 305-0506. The examiner can normally be reached on Monday through Thursday from 7:00 AM-4:30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Mr. Nam Nguyen, can be reached at (703) 308-3322.

When filing a fax in Group 1700, please indicate in the header "Official" for papers that are to be entered into the file, and "Unofficial" for draft documents and other communications with the PTO that are not for entry into the file of this application. This will expedite processing of your papers. The fax number for regular communications is (703) 305-3599 and the fax number for after-final communications is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read 'Kaj Olsen', with a stylized flourish extending from the end.

Kaj K. Olsen  
Patent Examiner  
AU 1753  
November 4, 2003